

## MINUTES

### **PUBLIC WORKS / PARKS & RECREATION COMMITTEE**

March 16, 2016

A meeting of the Public Works / Parks & Recreation Committee of the Council of the County of Kauaʻi, State of Hawaiʻi, was called to order by Ross Kagawa, Chair, at the Council Chambers, 4396 Rice Street, Suite 201, Līhuʻe, Kauaʻi, on Wednesday, March 16, 2016, at 8:51 a.m., after which the following Members answered the call of the roll:

Honorable Mason K. Chock  
Honorable Arryl Kaneshiro  
Honorable KipuKai Kualiʻi  
Honorable JoAnn A. Yukimura  
Honorable Ross Kagawa  
Honorable Gary L. Hooser, Ex-Officio Member  
Honorable Mel Rapozo, Ex-Officio Member

The Committee proceeded on its agenda items, as shown in the following Committee Reports, which are incorporated herein by reference:

**CR-PWPR 2016-04:** on PWPR 2016-03      Communication (02/04/2016) from Committee Chair Kagawa, requesting the presence of the County Engineer and Deputy County Engineer, to discuss the circumstances relating to the Management Advisory Report for the Fiscal Year Ended June 30, 2015, Current Findings and Recommendations, 2015-003 (Improve Monitoring of Delinquent Receivable Accounts). **(Received for the Record.)**

**CR-PWPR 2016-05:** on PWPR 2016-04      Communication (02/18/2016) from Council Chair Rapozo, requesting the presence of the Acting County Engineer, to provide a briefing and status update on the Hanapēpē Bridge. **(Received for the Record.)**

The Committee proceeded on its agenda items:

Bill No. 2612      A BILL FOR AN ORDINANCE TO AMEND CHAPTER 14, KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO THE PLUMBING CODE **(This item was Deferred to the April 13, 2016 Public Works / Parks & Recreation Committee Meeting.)**

Councilmember Kualiʻi moved for approval of Bill No. 2612, seconded by Councilmember Yukimura.

Committee Chair Kagawa: It has moved and seconded to approve. What I am going to ask members is that we hold off on amendments. There have been conflicting amendments coming in and I do not think the Council should amend the Bill when there is conflict with Plumbers Union and whatsoever, because I just got an E-mail yesterday suggesting an amendment from the Plumbers Union. My suggestion is that we defer it and let the Administration review the amendments and the request from the Plumbers Union. Let us take our time and let us do it right. I think I just want to remind all members that all of the other Counties have not acted on these measures. I am therefore not inclined to rush if we are going to be the guinea pigs of leaders, if you want to say, in this area and being the first to adopt. But at least if we are going to be first, let us be sure it is all properly vetted and that every amendment that we have brings forth a clean bill that we can agree on as it goes to the Council level. What I am going to ask is that at some point after the presentation, that we defer for at least a month and give time for those things to happen properly. Also, I am going to have staff, and this is a request now, I want staff to get in contact with all of the Code Enforcement Officers on all of the other islands and to see where they are in the process, why they have not adopted or proposed bills at this point, and also to follow-up with the Public Works Committee Chairmen of each Council on the other islands to see what is their take on this Bill or what their understanding is of the adoptions of their similar bills like these. So that is where I am at. I am just going to be suggesting that. I am one (1) vote, but that would be my suggestion. Let us get educated today. Go ahead.

Councilmember Chock: Just a process question, Chair?

Committee Chair Kagawa: Yes.

Councilmember Chock: I know there is a lot of amendments. Are we planning on just continuing down the path of amending as it is or actually reintroducing it with the changes?

Committee Chair Kagawa: No. I think amendments are sufficient.

Councilmember Chock: Okay.

Committee Chair Kagawa: I do not think we change the intention of the Plumbing Code. The intention of the Bill is to update, and we are going to learn from them. I think we are on 2008 and we are doing to adopt up to 2012. The intention of that is, of course, not being changed by going some amendments that to me, are just technical and we are just amending certain areas. Most of the amendments are actually coming from the Administration after discussion with various players. I have one (1) that just came in and I am sure that Doug has not seen yet. I do not think we should be rushing and amending and not being sure if our amendment was properly made that satisfies the Plumbers Union and that satisfies the Administration as well. Let us consider my recommendation and first let us, I guess, get educated on what entails in the Plumbing Code. With that, Administration.

There being no objections, the rules were suspended.

LYLE TABATA, Acting County Engineer: Good morning Committee Chair Kagawa and members. Lyle Tabata, Acting County Engineer. Thank you for this opportunity. Doug Haigh has provided a presentation to begin the process. I just wanted to say that Committee Chair Kagawa is right. This is the update. We have

not had a Code update since 2008. This is the 2012. However, I was reminded yesterday by one (1) of the leaders in the industry that they are working on the 2017 Code updates as we speak. So there is never a good time, I guess, however, we do these changes with the safety of the public and the people who do the work in mind. Thank you.

DOUGLAS HAIGH, Chief of Buildings: Good morning, Doug Haigh, Department of Public Works, Building Division Chief. I am here to provide information on the two (2) bills. I have split it. I put it on the same PowerPoint, but it is split in two (2) sections. I assume right now we are discussing Bill No. 2612, the Plumbing Code, and then later we will be discussing Bill No. 2613, the Electrical Code. Bill No. 2612 is the adoption of the 2012 Uniform Plumbing Code (UPC). Actually, we are on the 2006 Uniform Plumbing Code. Basically, we are two (2) Codes behind and actually there is a 2015 Plumbing Code that we are not moving to. We are actually kind of three (3) Codes behind. In this presentation, I will go over the Code review and amendment process, the significant changes going from the 2006 to 2012, the support we have gotten for moving forward with this, and then I was going to discuss the floor amendments that are currently submitted to you folks. I am not aware of any new communication from the Plumbing Union. I have been working with them, and actually the last change to the floor amendment was a change that they requested, which we were agreeable to.

Code review and amendment process. First, there is the National level. These Codes are National Codes. The Uniform Plumbing Code is prepared on a National level and it follows the consensus standards development process and it is using volunteers representing varied viewpoints and interests to achieve a consensus on plumbing issues. So you are getting Nationwide, a wide group of people, reviewing the changes and coming to consensus on "yes, these are the changes that we should move forward with." Then we have the State level. The Hawai'i State Plumbing Code is developed by the State Building Code Council to provide Hawai'i amendments to the National Code.

State Building Code Council. The amendments were prepared by a subcommittee, which was chaired by a Mechanical Contractor/Subcontractor who is a member of the group of the Plumbing/Mechanical Subcontractors and working closely with the Plumbing Union. Also, the design professionals were involved.

*(Councilmember Kualii was noted as not present.)*

Mr. Haigh: The State Building Code Council amendments were approved July 8, 2014. The meeting included representatives from all four (4) County Building Officials, Plumbing Union, Plumbing/Mechanical Subcontractors, General Contractors, Department of Land and Natural Resources (DLNR), Department of Accounting General Services (DAGS), United States Green Building Council (USGBC), Building Industry Association (BIA), and Architects Institute of America (AIA) representatives were there. The formal adoption of the Code was delayed due to limited resources. The State was never able to provide the resources necessary to go through the administrative rule process. It actually has started the administrative rule process, and private organizations are helping the State to move forward on that.

County of Kaua'i. The Building Division conducted a task force meeting September 8, 2014. While we were pushing at that time because our Supervising

Plumbing Inspector, who is the person who normally manages and leads the task force, was about to retire. So one of his last tasks before he retired, I asked him please, let us get the community together, review the State amendments, see if there is any special issues for Kaua'i that should be included in the amendments, and be able to move forward with adoption of the 2012 Uniform Plumbing Code. In that meeting, there were various issues discussed and then we finalized the draft ordinance based on the State Plumbing Code with some administrative changes. Let me clarify. The State Building Code, State Plumbing Code, and State Electrical Code deal with the specifics in amending the National Code for items that are appropriate/unique for Hawai'i. The State Code has no administrative function. The Counties are the ones who issue the permits, do the inspections, and regulate the construction in the County.

*(Councilmember Kualii was noted as present.)*

Mr. Haigh: The portion of the Code which is the administrative portion, the issuing of the permits, that is all done by the Counties. We all have very similar language, but sometimes unique language in that section. So that is where we made some administrative changes. We distributed that to task force members and stakeholders, and it was of the State level that the Plumbers Union and their lobbying organization looked at it. Basically, the only feedback we got was from DLNR, Water Conservation Management Commission, in which I will get to that in just a second. I am sorry, I am jumping ahead.

Significant changes. There has been a movement in the Nation to conserve water. Water is a precious resource. What the Code did what was new is really provide and expand the Chapters on non-potable applications. This is being able to use greywater, manage greywater, be able to use rainwater, and manage rainwater catchment systems. The purpose of the change is to minimize consumption while maximizing recovery and reuse of alternative water resources. This did get pushed Nationwide because we have a lot of water problems Nationwide. Then, the next change was the Code based water conservation fixtures and fittings was replaced with water-conserving plumbing fixtures and fittings from Appendix L. This is the part of the Code that was not adopted in the State Code, but we moved forward on it based on request from DLNR, Water Conservation Management Commission.

The next slide will show what these changes are. 2012 for Water Closet shows one point six gallons per flush (1.6 gpf). Section L 402 is a special appendix for sustainability. It does go to a higher standard for water conservation, to a one point two eight gallons per flush (1.28 gpf) requirement. There is another document out there, actually prepared by the same organization, which is the 2012 Green Plumbing & Mechanical Code. You can see that it is the same. For urinals, we are looking at a change from one (1) gallon per flush (1 gpf) to point five gallons per flush (0.5 gpf). Showers, the 2006 was actually silent on showers. The 2012 is two point five gallons per minute (2.5 gpm), where the Uniform Plumbing Code that is Chapter L, which we are proposing to adopt Section, would be two gallons per minute (2.0 gpm). Faucets, you are going from two point to (2.2)...actually the 2006 was point two five gallons per cycle (0.25 gpc) and then we went to a two point two gallons per cycle (2.2 gpc) in 2012, and then with the upgraded section, it would be one point five gallons per cycle (1.5 gpc). We are not touching residential kitchen sinks in this Code, but we have a special amendment, which is a floor amendment, for the commercial pre-rinse spray valves, which I will get into later.

I looked at availability of these different types of fixtures. I did a search on the Home Depot website, what is available on Kaua'i. Pretty much all of the lower-end toilets meet the one point two eight gallons per flush (1.28 gpf). I could not find one that was higher. It is kind of moot in a way because these are the products that are out there. The manufacturers have already made the change. I did not check urinals because that is not that prevalent. I did not check showers because your shower, it is a very inexpensive item. So it is not something significant. I did check faucets. The lowest-end faucet at Home Depot meets the one point five gallons per minute (1.5 gpm). Changing showers and faucets to meet the new standards is a fairly simple process for the manufacturers.

Other significant changes. We brought the lead content section to be the same as federally mandated because this is a requirement, and that was done at the State level. Then, this next one is a little bit complicated. Just to kind of answer it when we adopted the 2006, the Hawai'i Department of Health was looking at using our Code, the State Plumbing Code, as the mechanism to regulate individual wastewater systems and greywater. They had significant amendments to the 2006 in order for them to be comfortable that they could use the Code. Since that time, they have decided that they are not going to use the State Plumbing Code to regulate those areas. They are going to stay with their administrative rule process to do it. What we did is we took out all of the amendments that were requested by the Department of Health and went with the base Code language. Then, we actually deleted Appendix K, well actually it has changed its letter now. But we deleted the appendix for individual wastewater systems from the Plumbing Code because that is regulated by the Department of Health. The greywater, the way that current State law is, is the Department of Health would regulate where there is individual wastewater systems and the Counties would regulate where you are connected to a municipal wastewater system. On Kaua'i, because of the confusion, we decided that we would regulate everywhere for greywater to make it easier for the people of Kaua'i, and work closely with plumbing inspectors on making that decision. We felt that we can provide that service to the public. We do have a special agreement with the Department of Health, which they are happy to allow us. So we regulate the greywater for the County of Kaua'i. This new Code will make those regulations easier. I will get into that issue in a minute.

Then we added some standards. One of these standards is answering a long standing request by one of our Councilmembers, is to provide standards for solar water heating systems. Our inspectors agreed this was good to do and really it is interesting. When the State made solar water heater systems mandatory for new residential single-family dwellings, actually the authority for enforcing that was in the State Plumbing Utility Commission (PUC). They passed it on to us, of course, as far as how we issued permits. But they had a standard for solar water heater systems. It was appropriate for us to include those standards in our Code so that when there are any questions of how you are supposed to design the system, you go to the standards. Now standards are not something that we review in detail on each permit application because there are standards that the design engineers are supposed to follow. We do not really review it in detail and enforce it in detail. But it is there and it is what the design professionals are supposed to follow. We also added in the public works construction and water system standards. Again, these standards are not something that we strictly enforce, but they are good to be referenced so that when designers design their plumbing systems, they know what the other system of standards are and told that yes, they are supposed to look at them.

Impact to housing costs with these changes. For the Plumbing Code, I did ask this question to my inspectors and also to people in the industry, and really there is nothing that we can see in the Code that would have a significant impact because we are not changing how you are supposed to do the plumbing in this Code. Plumbing is not that technical. Where it does get technical...there are greywater systems/reuse systems that do get very technical. But those are really engineered systems. So it is the mechanical engineers who would move forward with those systems who would have to respond to that. But for regular residential, really there may be some cost-savings because the new Code does allow some newer materials to be used. Then the greywater system, there is definite potential savings because the State was so conservative in their greywater systems design requirements that in essence, you were doing two (2) individual septic tank systems in order to greywater because the holding tank capacity that they were requiring in the State Code, it was like having to put in a septic tank. Really, following the standard, which is in the National Code, because there is such a movement on the National level to make greywater reuse practical, that they did not have these very onerous requirements that the State was requiring because there was so much more desire to make it practical and to be able to be used. But of course, it is still considered safe. But it does make the opportunity there to do greywater systems that are more economical than what the State is requiring with the current regulation.

Support. Really, the only group that came forward at the beginning of this process and asked formally for changes was the Department of Land and Natural Resources' Commission on Water Resource Management, requesting increased water conservation measures and approval of the added changes. Those were the changes I just reviewed.

The floor amendment. There was a revision to Section 301.2 requested by the Plumbing Union. That is the only change I am currently aware of requested by the Plumbing Union. We did have discussions with them and there was concern on the potential use of the International Plumbing Code as opposed to the Uniform Plumbing Code. My memory is in the 2003 Plumbing Code where we introduced the ability to use the International Plumbing Code, because it is a well-recognized National Code, it is actually required for all Federal projects to be used. We have restrictions on the ability to use it where we have a mechanical engineer having to design the system based on that Code. The only change here was adding in that it has to be the concurrent International Plumbing Code to the approved Uniform Plumbing Code. If we approved the 2012 Plumbing Code, the International Plumbing Code that could be used would be the 2012 International Plumbing Code. Fortunately, they are on the same three (3) year cycle of Code adoptions. While I did not see that really as something necessary, to me, it is always the latest Code is probably the best. But if it was important to them, I did not have any objections to it. Therefore, the Administration had no objections to allowing that floor amendment to move forward.

Then the other floor amendment was revisions to the conservation fixtures requested by DLNR Commission on Water Resource Management. I found a mistake that I made, and so we corrected the mistake where we put back in the sinks because the appendix did not cover sinks. We put back the base Code language for kitchen sinks and left it there, and they agreed with me that it was not really necessary to add in because they wanted to add in the Green Plumbing Code standards. But they agreed that kitchen sinks were not that important, but they would really like to stay with the commercial sink change. So I did move forward with the language on the

commercial sink change. Then, I did a check with the local plumbing suppliers and the ones they provide, that the local plumbing suppliers regularly provide, meet these higher standards. So really, it should not be any burden to our plumbing contractors and commercial owners because these are the fixtures that are already being provided. That is the end of the section on Bill No. 2612, the Plumbing Code.

Committee Chair Kagawa: Good job.

Mr. Haigh: To answer questions, we did get some questions and on February 25<sup>th</sup>, we responded. One of the questions is what is the status of the Code adoption of the other Counties? What I did is I contacted the other three (3) Building Officials at the four (4) Counties, and you folks should have this February 25<sup>th</sup> correspondence because it did get sent over. City and County of Honolulu, both Code adoptions in 2012 Uniform Plumbing Code and the 2014 National Electrical Code have been submitted to their Department of Corporation Counsel. So it is being reviewed for legal purposes. Maui County, they plan on adopting it this year, both of the Codes. But they have just started the implementation of a new planning permitting system that is taking a lot of their resources. Hawai'i County, at this time, they are not planning on moving forward of any of the new Codes this year and probably not during the current Administration. For Honolulu and Maui, it is a matter of resources, and same for us. I mean, we went from 2014 until now to move forward with these amendments, and it was the resources. We just did not have the staff. All of us have been going through issues. The Building Official from City and County of Honolulu has been strapped. He did not have his mechanical engineer on staff and he has other issues he has to address. So he was not able to get it, just like I was not able to get to mine. We probably would have been here much sooner if we filled the Code Enforcement Officer position, which is normally a position that normally moves forward with our Code amendments. But really, we did not that position. I had to wait until I had a break enough in my time that I felt I could put to this and personally do it myself, and same with Tim. He actually personally did most of work himself. He actually was the one who drafted the Electrical Code amendments at the State Building Code level. He did that himself.

On Maui, the real mover/shaker who has involved with Codes on Maui, he resigned three (3) or four (4) years ago. Their process slowed way down because he was the one who had the expertise and the knowledge to move forward on Code amendments. Maui has not adopted any Code amendments since he retired. Then, Hawai'i County traditionally, they have been really late. They have never adopted the 2006 International Residential Code. They have a unique community that look at Codes differently than the other communities. So that is where they are at in their process. I am open for any questions.

Committee Chair Kagawa: Questions members? Councilmember Yukimura.

Councilmember Yukimura: There has been a lot of talk amongst sustainability advocates about greywater systems. Are you saying now that the Code that is being proposed will allow for regulation of greywater systems and thereby allow for greywater systems to exist?

Mr. Haigh: Okay. We currently have regulations for greywater systems, which is the 2006 Plumbing Code, as amended. We had

greywater systems in there. But the amendments were so onerous, it made it difficult to do. I was actually one of the first to ever get a greywater system approved that I designed personally for my own home and I did it before these new regulations came in. So it was not quite so onerous. But yes, with the adoption of 2012, it will make it much easier. Now for us, we are going require greywater systems to be designed by engineers because we really do not have the expertise to review those systems. Really either an architect or an engineer could design a greywater system for a residential house. But we want them to design it and they should be following the Code and certifying it. By stamping the drawings, they are certifying they are complying with the Code, and then we will inspect according to the approved design.

Councilmember Yukimura: This will make greywater systems more possible for homeowners except that there will be an expense because you are requiring that it be designed by engineers?

Mr. Haigh: An engineer or architect could be designing it, yes.

Councilmember Yukimura: Okay.

Mr. Haigh: But it should be much less expensive than under the existing Code in place today.

Councilmember Yukimura: Maybe you can explain for perhaps the viewing audience, what greywater systems are.

Mr. Haigh: Okay. A simple greywater system captures your less hazardous wastewater coming out of the residence. Basically, you are capturing sinks, showers, tubs, your kitchen waste, your toilet waste, possibly your laundry waste, and I believe now laundry waste can go to the greywater system. But your kitchen and your toilet waste are more hazardous. Those would continue to need to go to an individual wastewater system. Now there are complex greywater systems, which will actually process the greywater in a system within the structure and then reuse that greywater for flushing toilets, that sort of thing, well basically flushing toilets. So those are available out there and are doable under the Code if we adopt it. We do not expect to see that level of water reuse on Kaua'i because the expense is way beyond the savings that you would get. But for simple greywater and part of what simple greywater systems do, they also protect your individual wastewater system because you cut down on the flow going to your individual wastewater system. If you are in an area where there is a high water table or you tend to get heavy rainfall and potential for overflow, by having a greywater system, you are going to reduce the amount of wastewater going to your individual wastewater system and much less likely have problems. That is why I personally went to a greywater system is because my septic tank system started having issues and as soon as I changed to the greywater system, which was about maybe twenty (20) years ago, I have never had any problem at all with my individual wastewater system.

Councilmember Yukimura: So it enables people to save a lot of money in terms of potable water if you can use greywater to water your plants, for example?

Mr. Haigh: Correct.



Councilmember Yukimura: In California where you are not even allowed to water your plants with potable water, that is the only way you can water it so it makes a much more flexible resilient household?

Mr. Haigh: And it goes back to years ago when everybody sent their laundry water off into the banana patch or whatever. This Code allows that to happen in a practical way where the current Code does not.

Councilmember Yukimura: Okay. Thank you for including the solar water heater standards so that we can assure our customers, those who are asking for solar water heating, to make sure that they meet certain quality standards. Thank you.

Mr. Haigh: Correct, and you are welcome.

Councilmember Yukimura: So you are protecting against poor and shoddy construction, basically?

Mr. Haigh: Yes, you are absolutely correct. It is consumer protection.

Councilmember Yukimura: Right.

Mr. Haigh: Because it is now in the Code and if they do not design to that standard and have a substandard system, the consumer has...

Councilmember Yukimura: Recourse.

Mr. Haigh: ...a clearly defined place of how it should have been designed.

Councilmember Yukimura: Standards.

Mr. Haigh: Yes.

Councilmember Yukimura: Thank you.

Committee Chair Kagawa: Further questions? I have some. One of the reasons why I initially deferred this item was that I asked and I spoke on the floor that I wanted a task force meeting due to concerns from community including Contractors Association that they were not sure what entailed all of the changes, and they had some concerns as to what would be the impacts to the cost of building a home and the cost of building a business. What was the dollar figure that would be impacting the businesses? They are worried especially about the middle-class and the poor, how much significant costs in light of the fact that no other County in State is adopting this Code. You said in this PowerPoint that you met them September 8, 2014. Were the contractors invited to that meeting and were they present?

Mr. Haigh: A broad range of Kaua'i plumbing contractors were there.

Committee Chair Kagawa: What about Contractors Association Kaua'i (CAK) because I believe Don Lutau, the former Code Enforcement Officer, is their consultant?

Mr. Haigh: In fact, in the first package where I sent you folks the Code, I included the minutes.

Committee Chair Kagawa: Oh, you have the minutes?

Mr. Haigh: It has a list of the attendees. I did not see Don Lutau there.

Committee Chair Kagawa: Okay.

Mr. Haigh: I followed the same task force that we used. I invited the same people we used when we adopted in 2006, and it may have been since it is just a Plumbing Code, we felt that if we are getting to the plumbing contractors, we did not really need to get to the General Contractors Association, which CAK, while it has many different contractors, it is primarily general. But we had a broad spectrum of the Kaua'i plumbing contractors to attend. I really thank them for taking the time because being part of this task force, you do not get paid and they have to take time when they could be out making money to come help and review the Codes. I really appreciate their help in that process.

Committee Chair Kagawa: I guess part of the concern that they have is that today it is March 2016. We had that meeting in September 2014. I guess when you had that initial meeting, they thought it was coming and then maybe as we hit 2015, they said, "Well, maybe that meeting or that Code is not coming any time soon," and forgot about it. Now that it is on the floor, they do not remember what happened in that meeting and what the changes were. I do not know if we needed another meeting just to say, "Hey, remember we talked about it? These are the changes. Are you folks still good with it?" I guess that is what I had hoped would have happened because I think you all know that not one (1) of us here are plumbers or electrical contractors. When you give us this presentation and tell us the positives and everything, we do not know what are the negatives because everything that you do there is a negative and in here the negative looks like the dollar sign probably. We just wanted everybody to be on-board. It makes it very easy for lay people like us, who are not experts in these areas, to adopt when we have general consensus. Another way of getting that general consensus is when a big County like City and County of Honolulu with a million plus people would adopt it as well. Then it would be as you said yesterday, "a slam-dunk" because Honolulu is doing it. Okay. We should do it too. The negatives are far outweighed by the positives. I am just a little uncomfortable.

Mr. Haigh: Okay. Let me respond to a couple of the issues that you just raised.

Committee Chair Kagawa: Okay.

Mr. Haigh: As this draft ordinance was being prepared, I did send it back to all of the members of task force because we added in the water conservation members and I wanted to give them a chance to comment on those. Nobody came back to me. Upon your request to do further outreach to stakeholders,

I did contact the Contractors Association of Kaua'i. I was given several people to follow-up with. I had several phone conversations with the Plumbing Contractor who was recommended by CAK. He did not see any changes, issues, or concerns. His one was the commercial kitchen valve. He did not know if it was available. I did follow-up with the two (2) vendors that he uses and both of them said that ones that they have in stock meet the requirement or the ones that they normally order. He was satisfied with that. Don Lutau never came back on any concerns that he had as representative of CAK.

In the past, we always waited for City and County of Honolulu to move forward with Code changes, well, ninety-nine percent (99%) of the time as far as my memory. We let them go first to help go through that public process. But with the establishment of State Building Code Council, all of a sudden we had the same process, but actually with a broader group because now all four (4) County Building Officials are involved in the discussions developing the amendments to the model Codes that are appropriate for the State of Hawai'i. With that and part of it too, the reason we have a State Building Code Council is the industry was saying "we want all four (4) Counties to be working on the same Codes and we want current Codes" because what happened is we were all on a random number of Codes and we are all really far behind. Beginning the State Building Code Council and with the State Building Code Council we get this broad outreach of output that City and County of Honolulu had when they were developing theirs. Of course there is no input from City and County Council until you actually go through the ordinance change. But with the professionals because you have the unions, you have the contractors, you have the subcontractors, you have the Building Industry Association, you have the design professionals, you have four (4) Building Officials, you have members of the public attending these meetings, you have the State Attorney General Representative there at the meetings to help make sure everything we are doing is legal, you have Department of Accounting General Services which they are there ones who control construction for all State buildings. They are there. So we get their input. Then we have the Department of Health. We get their input into the Codes. Then you get DLNR. We had the Water Conservation Management Commission representative there in those meetings giving input. You have the US Green Building Committee. These are all players Statewide who are giving us input toward the Code development. So we really got that broad brush input for the State of Hawai'i. To me, it is not as important, and City and County of Honolulu is moving forward. Tim is trying to push it. It is in Corporation Counsel. Hopefully it is going to come out soon and go to their Council for their review. But he and I have been kind of the ones now who are left who have been through Code development local amendment process. We are able to move quicker than say Maui because Maui, the Code Official there, he has not done it before. It is a little harder for him to get started. Like he mentioned in his correspondence to me, he is stuck on this new planning permitting software system that you have to put one hundred percent (100%) attention because that is customer service here today now. So he has to put his full attention to that. Anyhow, that is a response.

Committee Chair Kagawa: We are at a caption break. We will take a ten (10) minute caption break, and then I will resume a couple more questions.

Mr. Haigh:

Okay.

There being no objections, the meeting recessed at 10:39 a.m.

The meeting reconvened at 10:53 a.m., and proceeded as follows:

*(Councilmember Yukimura and Council Chair Rapozo were noted as not present.)*

Committee Chair Kagawa: How long does it typically take for a building permit process for residents?

Mr. Haigh: For electronic plan review, almost all agencies are getting their initial review done within a week.

*(Councilmember Yukimura was noted as present.)*

Committee Chair Kagawa: Okay.

Mr. Haigh: Now there is processing time, getting it in, getting it ready to get to the agencies, and there is processing time after to get the final permit issued. That is if the first review is good. I would say for residential, it should be thirty (30) days for the first review. Now, the Planning Department still has some challenges in getting that one (1) week deadline.

Committee Chair Kagawa: Okay.

Mr. Haigh: It can be late. We have been having technical problems for our monthly reports. I have not been able to see the total time, but I have been watching. We have a new weekly report on electronic plan review and see the response time from every agency for electronic plan review submittal. The maximum right now, is about thirty (30) days....

Committee Chair Kagawa: Okay.

Mr. Haigh: ...we are seeing to get out that first response.

Committee Chair Kagawa: I guess my question was how much more time is it going to take to do the plumbing and the electrical portions if we should update to the 2012?

Mr. Haigh: This should be no impact to the review time.

Committee Chair Kagawa: Okay.

Mr. Haigh: Actually for residential, during the permit process, we do not have a plumbing electrical review. We review it for some plumbing/electrical issues, but not anything significant. Then they come in for the plumbing permit or electrical permit. They put what is going to be included and then we have really manage it by the inspection that it is compliant with the Code on residential.

Committee Chair Kagawa: The current staff would be able to handle these changes that will be made? We will not need additional staff? We will not need significantly more additional time?

Mr. Haigh: It should not impact our Code review and permitting process, either Code.

Committee Chair Kagawa: Last question I have for now. What is the increase in material cost that will be affected in the plumbing side to a typical home, like a three (3) bedroom/two (2) bath home costing maybe two hundred fifty thousand dollars (\$250,000)? What would be the additional cost of materials and what would be the additional labor projected costs or did we not do these analyses?

Mr. Haigh: In our discussions with the professionals, plumbing contractors, and our Code enforcement plumbing expert, senior plumbing inspector, we do not see any increase in materials or labors for adoption of this Code.

Committee Chair Kagawa: Thank you.

Mr. Haigh: Because the fixtures are already on the market. It is a Nationwide thing and they are produced Nationwide. So the available fixtures are pretty much all meeting the current Code.

Committee Chair Kagawa: Thank you. Further questions?  
Councilmember Kaneshiro.

Councilmember Kaneshiro: I just have a question. It was more of a confirmation, I guess. Are there any changes in this Bill that did not go through the State review and it is maybe a change on Kaua'i? People say, "Hey, we want to do this," and it was added in here or all of the changes in this just from the State review?

Mr. Haigh: Okay. As I mentioned, the administrative section on the permitting process and inspections, that is not reviewed at the State level. Those are all local Kaua'i. The only issue, the increased water conservation measures were discussed at the State level. At that time, we decided "no, we will go ahead and wait until the next Code" because my memory is that the 2015 Uniform Plumbing Code was already following those requirements. We figured well, we will just wait for the next Code and it will automatically happen. But due to increased lobbying from the DLNR Water Conservation Management Commission, the amount of time it has been since the State amendments were adopted, and also when we were discussing the International Energy Conservation Code, one of the proposals put forward was that we should have a higher tighter standard on our water use because you use so much electricity/energy moving water. So that was another reason why I said "Okay, it makes sense to go with this higher standard because not only are we conserving water, but we are also conserving energy." The Department of Water, I do not know if it is Wastewater or Department of Water, but those are the two (2) highest energy users in the County of Kaua'i. If you can reduce the amount of water people use, you are going to reduce the amount of energy they use for pumping that water. So that was another reason why I felt that it was justified to go above the State amendments on that item. Then the other item that we changed was the recent change that is a floor amendment, the language referencing the International Plumbing Code and having it be the concurrent edition. That was not the language that was at the State level. But based on the request from the Plumber's Union, I had no objection to making that change for them. That was not reviewed at State level.

Councilmember Kagawa: Are those amendments incorporated in here?

Mr. Haigh: The floor amendment brings in the language requested by the Plumbing Union. The floor amendment amends some of the changes that we made for water conservation fixtures.

Councilmember Kaneshiro: Okay. Do we not have that floor amendment?

Mr. Haigh: Yes, you should have it.

Councilmember Kaneshiro: Okay.

Committee Chair Kagawa: Further questions? I have a follow-up. On the first question about using less electricity to push water flow and us adopting that special amendment, is the technology on that working or is there still a lot of improvements that need to be made because I do not want to require the people of Kaua'i to do something where the technology is not mastered yet. I will give you an example, our energy efficient light switches in our offices. We put those in and you do not know how many times I have asked Eddie to call your electrical workers to try and help me turn the switch off and on. I believe the technology on those energy efficient light switches were not mastered when we installed it. I do not want to force all of the public to go with something that they are still working on the technology.

Mr. Haigh: Based on the research I have done, you cannot get the old toilets anymore.

Committee Chair Kagawa: Okay.

Mr. Haigh: When I did my research on Home Depot's website, available on Kaua'i's store, the one point six gallons per flush (1.6 gpf) toilets are not available anymore. When they first came with the low flow toilets, there were problems. But I believe now with the new standard, all of the toilets that are on the market available at Home Depot, are at the current standard. My suspicion is Nationwide, since this is a new Code, the manufactures are not manufacturing the old ones anymore because there is no market.

Committee Chair Kagawa: Further questions? Seeing none, I want to thank you for your testimony. Does anybody in the public wish to speak on the Plumbing Code?

ALLISON S. ARAKAKI, Council Services Assistant I: Committee Chair, we have two (2) registered speakers. The first registered speaker is Matthew Bernabe, followed by Alice Parker.

MATTHEW BERNABE: Matt Bernabe, for the record. Disclaimer, I already own my house, not building. I already have all of my things in and I am just going to talk about the grey wastewater septic tanks. Some of the negative effects that I see right off the bat is the following of the State's model has been shown to just shunt it over to the public. Just like connecting potable water to development projects, the old method and somewhat still used method of "no more source, locate it yourself" is directly related to the inflated cost of homes when they are built. If you are going to incur big costs, I hope there is at least a plan to put a seventy-five percent (75%) rebate so that the person building or buying these homes can get some reductions, right? We all hear you talk about affordable housing. This is linked. This is correlated. The other negative effect that I see is that it takes away the discussion

from tying into a sewer/wastewater treatment. I live in Wailua Houselots. I just drove here this morning and as my daughters in the audience will testify, the smell was horrible, right? I have heard them testify that the line in Kapa'a has a couple of breaches that they themselves do not know about. This is what I want to see. Yes, there is going to be rural areas that will have to not be able to tie into a septic system on this island and even in O'ahu. But for developments that are oncoming that you are going to implement this development code, right, why do we not make that money that would be incurred into individual systems collectively as an aggregate, go towards a sewer for the region, right, tied into a wastewater treatment? Make those standards higher and guess what? We might actually have a better model. Yes, we are going to have to put some septic some places. It is not going to be feasible for small little upstarts that are way off the region. That very understandable. But this is large sums of money that individual projects will have to do. I see them throwing it into the pot together and coming up with something that will really benefit. I will tell you why. Oh, I see my light. I will be back. I have the second half of that story.

Committee Chair Kagawa: Next.

Ms. Arakaki: Next registered speaker is Alice Parker.

ALICE PARKER: Greetings. Hi Councilmembers. Alice Parker, for the record. Sorry. You heard Plumbing Code greywater capture use is essential because of our population size and increases. Cost will be moderated when such use is compulsory, which is essential in this warming climate on our planet. This requirement is a basic expense for each construction and we cannot go back to tents. We need water and we need to recycle. Thank you.

Committee Chair Kagawa: Thank you, Alice. Anybody else wishing to speak? Matt, second round. Matt, when you stop at the yellow light, you are giving up thirty (30) seconds.

Mr. Bernabe: That is alright. That is okay.

Committee Chair Kagawa: Alright.

Mr. Bernabe: Because I needed more than thirty (30) seconds. Matt Bernabe, for the record again. All I was going to say was I live in Wailua Houselots, which are is a pretty old community. Most of us are on a cesspool. We have old cesspools. We do not have septic. However, the lot across from me for a long time had a portion of it that was un-subdivided like my house. I have a Condominium Property Regime (CPR), right? An acreage cut in half and second home put with an easement in the back. Well, the lot across me was just a single house and then about six (6) or seven (7) years ago, they ended up developing it. He is my friend. I knew the person before he bought it. There were several really good trees on the property. To put in that system, he had to rip those trees out and then it just so happened that that huge flood that we had, was one of the floods. I do not think it was the Ka Loko one. One of those other big boldish rains. He just put all of that. It was all up. The plant down at the corner of the highway, by Wailua Houselots had backed up because of its inefficiencies and leach field had literally filled up and flooded us out and was added to the collective. So removing some of these trees and brushes in order to put this infrastructure, yes, you can put your grass and put your

garden and whatnot, but you are adding to the flooding, versus taking that money and having it tied into a comprehensive sewer system. The reason I say that is because that would be able to actually treat the water better than just greywater and then having it run-off. I know there is an argument that it is all clean and safe. But you never know until you know. Like they said, Committee Chair Kagawa said, you do not know the science. I have people say it is absolutely safe. However, when I go by the new soccer field by Lydgate Beach that they water with greywater, it stinks. I actually do not let my kids play on that grass because I do not trust it. Maybe I am smelling the plant, but I will tell you it is the grass. Maybe I am absolutely wrong on this one. But I would rather have it go to a sewer and then used better. Thank you.

Committee Chair Kagawa: Thank you. Anybody else wishing to speak on this?

There being no further testimony, the meeting was called back to order, and proceeded as follows:

*(Council Chair Rapozo was noted as present.)*

Committee Chair Kagawa: Members, further discussion?  
Councilmember Yukimura.

Councilmember Yukimura: I want to thank Doug Haigh and the Public Works Administration for all of the work that is being done on this. I think it is important to stay current both for public purposes like water conservation, but also for our plumbers industry and association because they too, want to be able to install the most modern kind of devices. I think it is very interesting to me that the manufacturing sector has kept up. I mean, often times you have local governments wanting to do regulations and the manufacturer, who is really far away, is the one that is the stumbling block. But here, they seem to be ahead or at least current. I am very impressed that the system in general, works well. The description of the State Council with all of the stakeholders around, all of the interest being able to vet this at a regular interval all the time, and keep our Codes updated is very impressive to me. I hope we will be able to move ahead not without addressing all of the concerns. I think we have to do that. But it seems like we are pretty close. Chair, if you are going to be suggesting a deferral. I am okay with it as long as we do not drag it on.

Committee Chair Kagawa: Thank you. Further discussion? Seeing none, I just want to again reiterate that I want one (1) month deferral just so that we have all of the amendments all clean and vetted. I want to just thank Jenelle on the Plumbing Code and Christiane on the Electrical Code because this is not an easy task especially for us, something so complicated that we are not experts in, to get all of the stakeholders to give input. Sometimes you find Plumbing Unions will contact us because they have come to an agreement with Doug and it gets complicated because all of what have not gone through Doug maybe comes to us. But that is what we are here for. We are here to provide that second layer to the public. I just want to run this amendment that I just received through Jenelle. She can work it out with Doug and hopefully we can come to agreement. I think having a clean bill will be best for us instead of having a bill pass and then we see that there is potential problems later on down the line. That is my only rationale. I see the positives. I am not ignorant to that. But we want to do it right way especially when the other islands have not bit on the bait yet. I think having those letters to the City and County of



Honolulu, Maui, and Big Island will give us something in writing that shows that their intention is to also move in that direction. I do not think it is right if Kaua'i County is the only one that has something that only our residents, our contractors, and our commercial businesses will be subject to. I think it makes for an un-level playing field. I think that everybody should be adopting the same time. What you have is we have plumbers being trained under the Kaua'i Community College (KCC) program under the same Code as existing, then we will have a different Code here, and if they go work on O'ahu, they have a different Code there. It really complicates things. I do not know why we have that different levels. Sometimes we will go first and then other Counties will go next. But that is not a problem I can fix here. All I can do is make sure that we do it the best we can when we finally push ours out. That is my intention. If I can have a motion to defer...yes?

Councilmember Yukimura: Can I ask one (1) question?

Committee Chair Kagawa: Go ahead.

Councilmember Yukimura: Our staff has the two (2) amendments that have been mentioned here now, the one from the Water Commission?

Committee Chair Kagawa: Yes.

Councilmember Yukimura: Water Management, and the other from the Plumbers Association?

Committee Chair Kagawa: Yes. I think maybe the second one will changed a little bit. But I just want Jenelle to go work with Doug.

Councilmember Yukimura: But those would be the two (2) at least at minimum that we are working on during the month deferral?

Committee Chair Kagawa: Yes.

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: We will just get a cleaner bill. In the meantime too, let us get something in writing in from the other Council Chairs on Public Works as well as the Code Enforcement Officers just to confirm that they are going to be moving in this direction because of the obvious reasons and benefits. If I can have a motion to defer to the April 13, 2016 Committee Meeting.

Councilmember Kualii moved to defer Bill No. 2612 to the April 13, 2016 Public Works / Parks & Recreation Committee Meeting, seconded by Councilmember Kaneshiro, and unanimously carried.

Committee Chair Kagawa: Next item, please.

Bill No. 2613      A BILL FOR AN ORDINANCE TO AMEND CHAPTER 13 OF THE KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO THE ELECTRICAL CODE (This item was Deferred to the April 13, 2016 Public Works / Parks & Recreation Committee Meeting.)

Councilmember Kualii moved for approval of Bill No. 2613, seconded by Councilmember Yukimura.

Committee Chair Kagawa: Moved and seconded to approve.

There being no objections, the rules were suspended.

Committee Chair Kagawa: Department of Public Works again. You may proceed when you are ready.

Mr. Tabata: Committee Chair Kagawa and members, Lyle Tabata, Acting County Engineer. Doug will continue now with the Electrical Code, and noticed that we have been joined by Darryl Date of the Fire Department because they have a stake in this effort also. Continue, Doug.

Mr. Haigh: Doug Haigh, Public Works, Building Division.

There being no objections, Committee Chair Kagawa relinquished Chairmanship to Councilmember Kaneshiro.

*(Committee Chair Ross Kagawa was noted as not present.)*

Mr. Haigh: Bill No. 2613. The primary purpose is adoption of the 2014 National Electrical Code. We are currently on the 2008 National Electrical Code, which means similar to the Plumbing Code, we have missed the 2011 addition to the National Electrical Code. So we are moving up from the 8<sup>th</sup> to the 14<sup>th</sup>, skipping the 11<sup>th</sup>. Well, any changes that that were in the 11<sup>th</sup> are in the 14<sup>th</sup>, but we missed that Code cycle. Similar to the Plumbing Code, I would like to go through the Code review amendment process, discuss the significant changes, talk about the support, and discuss the floor amendment. Very similar to the Plumbing Code, but managed by a different organization. The National level follows a consensus standard development process using volunteers and looking for consensus on electrical issues. Similar to the Plumbing Code at the State level, the Hawai'i State Electrical Code is developed by the State Building Code Council to provide Hawai'i amendments to the National Code.

At the State Building Code Council, the amendments to the 2014 National Electrical Code were discussed and approved at December 9, 2014 meeting. That meeting included representatives from all four (4) Counties, building officials, Electrical Contractors Association, General Contractors, Department of Land and Natural Resources, Department of Accounting and General Services, United States Green Builders Committee, Building Industry Association, and Architects Institute of America. The electrical unions were not at that meeting, but my memory is that they were at the earlier meetings when we were discussing the Code, and they were satisfied with what we were going forward with. Again, the formal adopt of the State Electrical Code has been delayed due to limited resources. It is now finally going through the administrative rule process. So it is moving forward at the State Code level at this time.

County of Kaua'i. We prepared a draft bill based on the proposed State Code Electrical amendments with minor administrative changes. Again, similar to the Plumbing Code, the State Code deals with the technical issues on the adoption of the

National Code, and they do not deal on permitting and enforcement issues because those are managed by the Counties.

*(Committee Chair Kagawa was noted as present.)*

Councilmember Kaneshiro returned Chairmanship to Committee Chair Kagawa.

Mr. Haigh: We distributed the amendments to various stakeholders including electrical contractors, electrical union, Contractor Association of Kaua'i, and General Contractors Association of Hawai'i. Then, we made changes in response to comments prior to forwarding the Bill to the Council. So we worked with the stakeholders and made amendments to help us have a consensus based Code.

The significant changes are primarily technical. Going from the 2008 to the 2014, there were issues for alternative energy systems; solar, photovoltaic, and wind systems that have brought the Code up to date. These are important issues because the technology is changing so quickly. When we fall eight (8), ten (10), or thirteen (13) years behind of the National Code, we are nowhere near the technology that is being used today. Then, another change is expanding use of ground fault circuit interrupter (GFCI) protection to laundry areas, providing separate circuits, and ground fault circuit protection for dishwashers, increasing areas needed for arc-fault circuit interrupter (AFCI) protection, and then requiring ground fault circuit interruption for outlets for portable generators.

I would like to step back a minute and kind of explain these issues in terms that hopefully are more easily understandable. Historically, we protected our homes and electrical systems with circuit breakers. The circuit breakers were managed by current. So as to however much electricity went through that circuit was managed by the breakers. So if you had more than twenty (20) amp circuit, if you had more than twenty (20) amps, then it would trip. What this did is this protected the wires from burning out from trying to pull too much power through wires that were not made for that amount of power. That is historically how we provided safety. Then just stepping back further, our primary goal/purpose of our Codes are to provide minimum standards for life safety protection. That is the basic standard of our job, is to provide minimum standards for life safety protection.

In previous Codes we started adding ground fault circuit interruption protection in addition to the current. What the ground fault circuit interruption did for you, it provided safety to avoid electrocution because what would happen is the person would provide the ground rather than the circuit. So you would not trip the current regulatory device, the breaker, because it does not take that much current to kill a person. The ground fault would sense that there is an interruption to the ground of the electrical circuit and therefore trip the breaker, which would greatly reduce potential of the person acting as the ground and being electrocuted prior to getting the safety of the system. So that was the purpose of the ground fault circuit interrupters, was to provide protection from electrocution. You saw them first in areas of high...bathrooms where somebody was next water because in a wet area, a human is more likely to become the ground. You also saw it in Occupational Safety & Health Administration (OSHA) because our contractors were getting electrocuted on job sites. So we were getting ground fault for our workers. That is where that increased. That has been in the current Codes. With this Code, they are taking it to

the laundry areas and dishwashers because again, those are areas where there is potential for water and for somebody to create that ground and be able to be electrocuted.

In the 2008, we added the arc-fault circuit interruption. This was added for fire protection because what happens is that you can get interruptions in your electrical wiring that create little sparks, but they are not enough. They do not draw the current that will trip the circuit breaker and they do not interrupt the ground necessarily so they do not trip a ground fault interrupter (GFI). But they create an arc, which can create a fire. Since 2008, they have been increasing the use of arc-fault circuit interrupters. The reason why this came in is because the technology was developed that could do this. Previously, there was not the technology to develop it to do this, but now, there is the technology. Actually, it was in 2008 when we started seeing this. When we adopted the 2008, our electricians and homeowners saw an increase in cost because well they are not new technology anymore, but they are a higher level of technology and they cost more. At an outlet level, your typical GFI will cost about fifteen dollars (\$15). Your arc-fault circuit interrupter outlet is about thirty dollars (\$30). Then you can also get this protection at breaker level; so if you get an arc-fault circuit interrupter breaker. The regular breaker is about ten dollars (\$10). But to get an arc-fault circuit interrupter breaker is between fifty dollars (\$50) and eighty dollars (\$80), fifty dollars (\$50) to seventy dollars (\$70) depending on the amperage of the circuit that you are protecting. So that is where you are seeing the big cost increase, is because you are getting more expensive breakers. There really should not be any labor increase because you are just replacing a newer technology with an older technology. So your actual cost of connecting the systems does not increase. Now, the separate circuit for dishwashers, that is a little more labor because you are putting in a separate circuit in. But again, that is for safety. I asked the Fire Department to be here because they can kind of address the issue of what causes home fires and why it is important now to get this type of protection for the homes to minimize fire potential.

DARYL DATE, Fire Prevention Captain: Good morning Councilmembers. Darryl Date, Fire Prevention Captain, Kaua'i Fire Department. Like Doug was saying, this arc-fault protection is just an added device to help prevent fires from occurring. For myself, I have been in the Prevention Bureau and part of our duties is for investigations. I have been doing this for twelve (12) to thirteen (13) years now. I have been to a number of structure fires here on Kaua'i where we narrowed down the point of origin of the fire to an outlet and also the use of extension cords going into outlets. With this new device, hopefully it will trip the breaker and eliminate the power and eliminate the heat that would start a fire.

Mr. Haigh: Thank you, Darryl. Of course we cannot give you statistics how many fires that they prevented because if there is no fire, we do not have a statistic on it. That was one of the things I read when I was doing research on the arc-fault circuit interrupter and the movement toward making it more broadly used. Support. The electrical union has supported it. They had an issue with one (1) of the administrative changes we were making, and we addressed their concern before we brought the Bill to Council. So that is not part of it. But they strongly support going to the new 2014 National Electric Code. National Fire Protection Association, they have submitted a letter of support for the new Code. They are actually the organization that drafts and manages the Code. Then, Hawai'i Solar Energy Association, they actually provided support back when we worked on it with the State

Building Code Council because they saw the need to get the new Code in so that we are properly inspecting and permitting solar energy systems.

The floor amendment. At this point, the only change we have issued for a floor amendment, we had redundant language in our Code on dealing with utility work. We had it both in the scope and we had it in the issuance of permits sections. This was the issue that the electrical union expressed concern when this Bill first came to public hearing. So from listening to them at that point, we have with them and came up with language that was agreeable. To me, it is important to remove redundancy in your ordinances and bills so that you do not get potential conflicts. In the scope really was the proper place because utility work is not subjected to the Code at all, not just issuance or permits, but not to any part of the Code. So that was why we feel it is best to leave it there. Thank you.

Committee Chair Kagawa: Thank you. Good job.

Mr. Haigh: We are ready for any questions or concerns you may have.

Committee Chair Kagawa: Members, questions? Councilmember Yukimura.

Councilmember Yukimura: Thank you for a very good presentation. I have a question for Captain Date. How many fires do we get a year, approximately?

Mr. Date: Well, I get called out to major structure fires where property loss is over three thousand dollars (\$3,000) or if the Captain at the scene suspects an arson. On average, myself or one of my inspectors, we investigate approximately twelve (12) structure fires a year.

Councilmember Yukimura: A year. You mentioned that several are due to outlets or extension cords?

Mr. Date: Yes, we narrowed down the origin of the fire to an outlet. A lot of times the wiring right behind the plate of the outlet gets loose and may contact something else, another piece of metal, which will create the arc.

Councilmember Yukimura: Do you keep track of the causes of all of these fires that you investigate or you have probable causes, I guess?

Mr. Date: Yes. In our fire investigation report, we label what the cause is.

Councilmember Yukimura: But they are not all criminally caused, right?

Mr. Date: No.

Councilmember Yukimura: But you do crime investigation reports for every fire?

Mr. Date: If it is suspected.

Councilmember Yukimura: Okay. Of the twelve (12) a year, how many are generally suspected crime related?

Mr. Date: Maybe a couple.

Councilmember Yukimura: The ones that you do not do a criminal investigation on, do you still record the cause?

Mr. Date: Yes.

Councilmember Yukimura: The potential cause?

Mr. Date: Yes. For every fire that we investigate, we try to determine the area and the cause of the fire.

Councilmember Yukimura: Okay. I might send a request in preparation for budget. Thank you.

Mr. Date: You are welcome.

Councilmember Yukimura: Thank you very much.

Committee Chair Kagawa: Further questions? I have a few. Daryl, thank you for your testimony today. I cannot help but remember just in recent history and recent months, a lot of fires in O'ahu, bad ones, with houses burning down. With those tragic events happening, why would City and County of Honolulu not adopt this already, this "slam dunk?" Why would they wait if a lot of fires are caused by poor outlets? You talk to the fire person in Honolulu, right?

Mr. Date: Yes, we do. We have quarterly meetings. But this is more of a Building Code. I believe Doug would be better to answer this question.

Committee Chair Kagawa: Okay.

Mr. Haigh: Yes. The Electrical Codes are managed by the Building side of things rather than the Fire Department.

Committee Chair Kagawa: Okay.

Mr. Haigh: They have the Fire Codes, but with the Building Codes. The National Electrical Code follows under one that typical Building Codes. The Building Official for the City and County of Honolulu was actually the one who pushed to move it forward at the State Building Council level first because he did his work in actually developing the amendments to move forward at State level, and really no significant changes at all to the National Code. But it is a matter of resources, limited resources, and when you can get to these things. So that is what holds us down, is the resources that we have to move forward.

Committee Chair Kagawa: We are going from the 2008 Code to the 2014 Code?

*(Councilmember Chock was noted as not present.)*

Mr. Haigh: That is correct.

Committee Chair Kagawa: Was there any in between that we missed?

Mr. Haigh: The 2011. Part of that was based on what was happening at the State Building Code Council. Department of Accounting and General Service was kind of the overseeing agency and then their resources got limited. So they said, "We are not going to be able to provide any more assistance for fast-forwarding administrative rules." Originally, the State Building Code Council was supposed to have an Executive Director who would be doing all of the work. The intent was is to adopt every National Code on the next cycle. The intent at that time, when we started State Building Code Council, is that we would be adopting every three (3) years. But the reality was there were no resources there. We said, "Hey, since we do not have the resources, let us go ahead and at least try to keep every other cycle." What we have been doing at State Building Code Council is trying to at least stay on every other cycle of what we are adopting. That is kind of why we skipped the 2011.

*(Councilmember Chock was noted as present.)*

Committee Chair Kagawa: I will go to the page where you did the anticipated increase to a typical house maybe between three hundred dollars (\$300) to five hundred dollars (\$500) relating to AFCI protection. Is there any labor costs in addition that one could anticipate?

Mr. Haigh: Well like I mentioned, adding a separate branch circuit for a dishwasher will create additional labor because you cannot share it with something else. So since it is a separate circuit, there may be some additional labor.

Committee Chair Kagawa: Like an additional outlet?

Mr. Haigh: Yes.

Committee Chair Kagawa: Instead of plugging it into another?

Mr. Haigh: Well, it is a different circuit. The wire from the dishwasher goes all the way back to the panel rather than potentially be connected with the garbage disposal or some other use.

Committee Chair Kagawa: It would need a separate one?

Mr. Haigh: Yes.

Committee Chair Kagawa: Separate to the panel. Any more questions members? Go ahead. Councilmember Kaneshiro.

Councilmember Kaneshiro: I have a question in relation to these ground fault circuit protection things. Do houses that currently do not have it, are they grandfathered in or would all houses have to come through and convert to it?

Mr. Haigh: Actually in the 2011 Code, they required that if you are doing any remodeling or replacement of your outlets, you have to upgrade

to AFCI if the Code required AFCI for new construction. That is a little bit unique. Yes. If a licensed electrician is replacing a broken outlet in a home, which technically they are the only ones supposed to do that, when we adopt this Code, they will be required to replace it with an AFCI breaker rather than a normal breaker. They are going to see a fifteen dollars (\$15) to twenty dollars (\$20) increase in cost to do that outlet replacement. It is outlets, not breakers. Excuse me. It is individual outlets, which I am sure Daryl is glad to hear that because not only do you protect the outlet, you are protecting the extension cords or anything connected to that outlet. So your traditional Christmas time fire where you are running your extension cord and plugging in all the lights. Of course the light-emitting diode (LED) lights we do not have such loads anymore. But problems with extension cords has been a source of fires. If you have an AFCI outlet, it will trip before you get the arc that is going to create that fire.

Councilmember Kaneshiro: Thank you.

Committee Chair Kagawa: Further questions members? Councilmember Yukimura.

Councilmember Yukimura: You estimate three hundred dollars (\$300) to five hundred dollars (\$500) cost. For the safety that it provides, you are getting huge value beyond the costs are you not?

Mr. Haigh: What is the value of a life? It always comes to that question, and also value of a home? My father's kitchen burned down. It almost burned down his house. I feel this particularly because I did the wiring when we did the remodel because in California at that time, you did not have to be a licensed electrician. I always thought "oh, my God, did I start that fire?" But if he had AFCI protection, because it was an outlet that ended up arcing that started the fire.

Councilmember Yukimura: Like you said, these are life safety protections.

Mr. Haigh: Yes.

Councilmember Yukimura: So they are pretty basic.

Mr. Haigh: To be perfectly honest, there has been resistance to this Nationwide. It was adopted Nationwide, the National Code. If you go on the internet and research it, there are voices out there, "why do we have to have more of them?" But you also look at fire protection. Is this a huge cost? Same thing as smoke alarms. You get people who object to having to add all of these smoke alarms. But that is life safety. This stops the fire at the source rather than getting people out of the home after the fire starts.

Councilmember Yukimura: Thank you.

Committee Chair Kagawa: Further questions? Seeing none, I want to thank you folks for your presentation. I am going to ask, is there anybody from the public wishing to speak on this? Alice.

Ms. Parker: Alice Parker, for the record. Actually, I have a question about extension cords. I use the ones with a switch. The extra power one. I presume that would short out before it would get to the outlet. But I am not sure. I



hope somebody technical could answer that. The other thing is that I think that these circuit breaker interrupters are terrific. Centuries ago, actually in 1957, I was in the shower and heard my husband yell. He turned on his electric blanket. He liked it on high to get warm, it went on fire, and never tripped anything in the house there. But he had very warm feet. Anyway, I am glad that this new Code is going in. Thank you.

Committee Chair Kagawa: Thank you, Alice. Any more speakers?

There being no further testimony, the meeting was called back to order, and proceeded as follows:

Committee Chair Kagawa: I have an amendment that I am not clear on and I think a month would not hurt to have Christiane, myself, Doug, and the electrical union just work on and make sure it is all clean before we pass it out to Council. I would not want to have any confusion that we have language in there that needed to be improved. If I could just ask for that. We will keep the two (2) Bills on track with each other. Defer for a month and then that also gives me time too. I am going to send all of these materials over to Karen Taketa at Contractors Association. I am also going to extend an invitation for Don Lutau to meet with myself and anybody from the Administration should we need him just to make sure that we know what exactly is going to be coming with the new changes and any impacts to the public that may be unforeseen in the presentation because as I have seen from the presentation, everything looks positive. But I know that sometimes there are things that may be brought up by the public that we should have asked. Just giving that month, I think, for something this important when City and County of Honolulu has not moved, Maui has not moved, and Big Island has not moved. It just brings me to the conclusion that we should just take our time a little bit and make sure that everything is all *pono* before we pass it. Councilmember Chock.

Councilmember Chock: I just wanted to thank our Administration for taking the lead on something this important and it is going to change, and also for the Committee for taking our time to make sure that we have all stakeholders involved in the process.

Committee Chair Kagawa: Councilmember Yukimura.

Councilmember Yukimura: I have no objections to the deferral. May I ask then, the intention is that hopefully with the month, we will be able to pass it at the next meeting?

Committee Chair Kagawa: Yes.

Councilmember Yukimura: To which we defer?

Committee Chair Kagawa: Hopefully with everybody, all the stakeholders and the public with smiles on their faces and supporting us doing it and giving them time to make sure that they have time to research and do whatever is necessary to know what the impacts are by doing this significant change that the other islands have failed to move on.

Councilmember Yukimura: Okay. It just seems with this Electrical Code, pretty basic lifesaving changes. I would not want too much of a delay, but one (1) month sounds fine.

Committee Chair Kagawa: Thank you. That is my intention.

Councilmember Yukimura: Yes.

Committee Chair Kagawa: Any more discussion? Seeing none, can I have a motion to defer to the April 13, 2016 Public Works / Parks & Recreation Committee Meeting?

Councilmember Chock moved to defer Bill No. 2613 to the April 13, 2016 Public Works / Parks & Recreation Committee Meeting, seconded by Councilmember Yukimura, and unanimously carried.

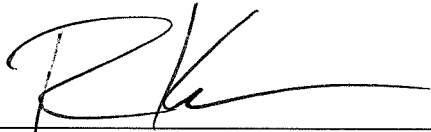
There being no further business, the meeting was adjourned at 11:43 a.m.

Respectfully submitted,



Allison S. Arakaki  
Council Services Assistant I

APPROVED at the Committee Meeting held on April 13, 2016:



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ROSS KAGAWA  
Chair, PWPR Committee